

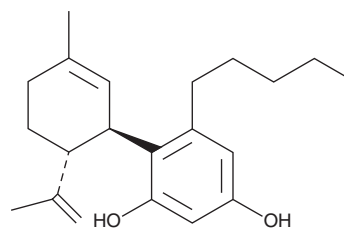
# Product Information



## CAY10429

Catalog No. 10004259

**CAS Registry No.:** 22972-55-0  
**Formal Name:** 4-[3-methyl-6R-(1-methylethenyl)-2-cyclohexen-1-yl]-5-pentyl-1,3-benzenediol  
**Synonyms:** Abn-CBD, Abnormal Cannabidiol  
**MF:** C<sub>21</sub>H<sub>30</sub>O<sub>2</sub>  
**FW:** 314.5  
**Purity:** ≥98%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A solution in methyl acetate



### Laboratory Procedures

For long term storage, we suggest that CAY10429 be stored as supplied at -20°C. It should be stable for at least two years.

CAY10429 is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of CAY10429 in these solvents is at least 35 mg/ml.

CAY10429 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of CAY10429 should be diluted with the aqueous buffer of choice. CAY10429 has a solubility of 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Traditionally, the activity of cannabinoid (CB) agonists was thought to be transduced by a pair of G protein-coupled receptors, CB<sub>1</sub> and CB<sub>2</sub>.<sup>1</sup> CAY10429 (abnormal cannabidiol) is a synthetic regioisomer of cannabidiol that fails to elicit either CB<sub>1</sub> or CB<sub>2</sub> responsiveness and is without psychotropic activity. CAY10429 induces endothelium-dependent vasodilation *via* a CB<sub>1</sub>/CB<sub>2</sub>/NO-independent mechanism.<sup>2</sup> At a dose of 20 µg/g in rats, CAY10429 showed hypotensive activity that could not be antagonized by cannabidiol or SR141716A. CAY10429 is therefore believed to activate a third type of CB receptor, provisionally called the non-CB<sub>1</sub>/CB<sub>2</sub> endocannabinoid receptor. CAY10429 also acts *via* these receptors to regulate the migratory activity of murine BV-2 microglial cells, with an EC<sub>50</sub> of 600 nM.<sup>3</sup>

### References

1. Felder, C.C., Joyce, K.E., Briley, E.M., *et al.* Comparison of the pharmacology and signal transduction of the human cannabinoid CB<sub>1</sub> and CB<sub>2</sub> receptors. *Mol. Pharmacol.* **48**, 443-450 (1995).
2. J rai, Z., Wagner, J.A., Varga, K., *et al.* Cannabinoid-induced mesenteric vasodilation through an endothelial site distinct from CB<sub>1</sub> or CB<sub>2</sub> receptors. *Proc. Natl. Acad. Sci. USA* **96**(24), 14136-14141 (1999).
3. Walter, L., Franklin, A., Witting, A., *et al.* Nonpsychotropic cannabinoid receptors regulate microglial cell migration. *J. Neurosci.* **23**(4), 1398-1405 (2003).

### Related Products

Arachidonoyl Ethanolamide - Cat. No. 90050 • Cannabidiol (DEA Schedule I Regulated Compound) - Cat. No. 90080 • HU-210 (DEA Schedule I Regulated Compound) - Cat. No. 90082 • HU-308 - Cat. No. 90086 • CB<sub>2</sub> Receptor Polyclonal Antibody - Cat. No. 101550

**WARNING: THIS PRODUCT IS NOT FOR HUMAN OR ANIMAL DISEASE DIAGNOSIS OR THERAPEUTIC DRUG USE.**

#### MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent under separate cover to the MSD supervisor at your institution.

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